January 25, 2010

Project 13230.000

Mr. Anthony Toto
California Regional Water Quality Control Board
Central Valley Region
1685 E Street
Fresno, California 93706

Subject: **Triennial Review of the Water Quality Control Plan for Tulare Lake Basin**
Poso Creek/McVan Facility
Kern County, California

Dear Mr. Toto:

AMEC Geomatrix, Inc. (AMEC; formerly Geomatrix Consultants, Inc.), has prepared this response to the public notice for the Triennial Review of the Water Quality Control Plan for the Tulare Lake Basin (Notice) on behalf of Berry Petroleum Company (Berry). The Triennial Review Issues List that accompanied the Notice recommended as a high priority the review of cold freshwater habitat (COLD) for Hume Lake, Lake Isabella, and the Kern River. Berry is requesting that the California Regional Water Quality Control Board – Central Valley Region (RWQCB) include a review of COLD for lower Poso Creek in the issue entitled Beneficial Uses Designations.

Berry's discharge of good quality produced water to Poso Creek is regulated under National Pollutant Discharge Elimination System (NPDES) Permit CA0078867, issued by the RWQCB to Berry on June 22, 2007. In accordance with that NPDES Permit and on behalf of Berry, AMEC prepared the enclosed Beneficial Use Studies Work Plan (Work Plan) and Beneficial Uses Studies Report 2007-2008 for surface water in the lower reaches of Poso Creek in the Kern Uplands Hydrologic Area (HA 558.90). The Work Plan summarized published flow data for Poso Creek (former U.S. Geological Survey monitoring station at Highway 65), which indicated that Poso Creek at Highway 65 is dry on average for 3 months a year and can be dry up to 7 months a year during low rainfall years. The Beneficial Uses Studies Report 2007-2008 found no evidence of COLD nor habitat that would support COLD in the lower reaches of Poso Creek. This conclusion was based on multiple lines of evidence; the lack of suitable habitat observed during site reconnaissances by an AMEC biologist, on intermittent flow in Poso Creek, on limited depth-of-flow when intermittent flow occurred, and on low dissolved oxygen measurements of water when flow occurred. Based on these observations and conditions, it is unlikely that COLD is attainable in the lower reaches of Poso Creek.

One of the stated purposes of the Beneficial Uses Studies, as described in the NPDES Permit, was to "determine if WARM (warm fresh water habitat) and COLD are attainable within the reaches potentially affected by the discharge (for reasons other than the quality of discharge) and obtain technical information necessary for the RWQCB to consider dedesignation of the

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use(s) in accordance with 40 CFR 131.10." As such, Berry requests that the RWQCB review COLD for HA 558.90 and for downstream stretches of Poso Creek in the Valley Floor Waters (North Kern HA 558.80) and consider dedesignation of COLD beneficial uses in those hydrologic areas, at least in the study area.

AMEC is submitting this request for review of COLD in Poso Creek on behalf of Berry. If you have any questions about this request, please call.

Sincerely yours,
AMEC Geomatrix, Inc.

William T. Aravanis, PE
Senior Engineer

Timothy G. Souther, REA II
Principal Environmental Scientist

Enclosures: Beneficial Use Studies Work Plan
Beneficial Uses Studies Report 2007-2008

cc: Robert E. Boston, Berry Petroleum Company